

Title (en)

COLD JOINTING APPARATUS, AND COLD JOINTING METHOD

Title (de)

KALTFÜGEGERÄT UND KALTFÜGEVERFAHREN

Title (fr)

APPAREIL DE JOINTEMENT À FROID ET PROCÉDÉ DE JOINTEMENT À FROID

Publication

**EP 2241398 A1 20101020 (EN)**

Application

**EP 08869903 A 20080929**

Priority

- JP 2008067676 W 20080929
- JP 2008002102 A 20080109

Abstract (en)

A room temperature bonding machine is provided with an evacuation apparatus, a gas supply apparatus, a pressure gauge, a cleaner apparatus, a pressure controller and a pressing mechanism. The evacuation apparatus evacuates gas from the chamber. The gas supply apparatus supplies introduction gas into the chamber. The pressure gauge measures the pressure in the chamber. The cleaner apparatus cleans first and second substrates in the chamber when said pressure is at a predetermined degree of vacuum. The pressure controller controls both of the evacuation apparatus and the gas supply apparatus so that the pressure is regulated to a target pressure. The pressing mechanism presses and bonds the first and second substrates when the pressure is set to said target pressure.

IPC 8 full level

**B23K 20/00** (2006.01); **B81C 3/00** (2006.01); **H01L 21/02** (2006.01); **H01L 21/18** (2006.01); **H01L 21/67** (2006.01)

CPC (source: EP US)

**B23K 20/02** (2013.01 - EP US); **B32B 37/10** (2013.01 - US); **B32B 37/1009** (2013.01 - US); **H01L 21/187** (2013.01 - EP US); **H01L 21/2007** (2013.01 - EP US); **H01L 21/67092** (2013.01 - EP US); **H01L 21/67253** (2013.01 - EP US); **B32B 2309/68** (2013.01 - US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 2241398 A1 20101020**; **EP 2241398 A4 20170215**; **EP 2241398 B1 20190703**; CA 2711227 A1 20090716; CN 101909803 A 20101208; CN 101909803 B 20130619; JP 2009164457 A 20090723; JP 4288297 B1 20090701; KR 101291463 B1 20130730; KR 20100095001 A 20100827; TW 200935493 A 20090816; TW I438822 B 20140521; US 2011083801 A1 20110414; US 8985175 B2 20150324; WO 2009087796 A1 20090716

DOCDB simple family (application)

**EP 08869903 A 20080929**; CA 2711227 A 20080929; CN 200880123613 A 20080929; JP 2008002102 A 20080109; JP 2008067676 W 20080929; KR 20107014400 A 20080929; TW 97138599 A 20081007; US 81117708 A 20080929